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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/280,256	03/29/1999	PETER KOZDON	99-P-7530-US	5509

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EXAMINER

SING, SIMON P

ART UNIT	PAPER NUMBER
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2645

DATE MAILED: 10/22/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/280,256

Applicant(s)

KOZDON ET AL.

Examiner

Simon Sing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 12-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 12-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3-9, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. US 5,790,781 in view of Harmeyer US Patent 4,491,694 and further in view of Brown US 5,822,406.

1.1 Regarding claim 1, Cox discloses a computer telephony system in figures 1-3. Cox's system comprises a computer 12, a microphone 14, speakers 18 and a headphone 19. The computer 12 further comprises a multi-function I/O subsystem 14 [sound system] in figures 2 and 3. Cox teaches using a stereo audio CODEC [audio processing means] to process digital audio signals into a digital stereo audio signal with a left channel and a right channel, and routes the stereo audio signal to speakers 18 and a headphone 19 (Figures 1 and 3; column 3, lines 56-67). Cox teaches connecting the speakers and the headphone to the computer 12, but fails to teach specifically routing only one stereo channel to speakers 18 or only the other stereo channel to a headset [headphone].

However, Harmeyer discloses a telephone to stereo amplifier interface in figures 1 and 2. Harmeyer teaches in figure 1 that the right channel of a stereo outputs is connected to speakers, and the left channel is connected to a handset's earphone [headphone].

In addition, Brown discloses a computer telephony system in figure 1A. Brown further discloses a switch 216 in figure 2 to select either a speaker or a headphone.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Cox reference with the teachings of Harmeyer and Brown, so that switching means, either software [output balance (left or right channel) of volume control] or hardware, would have connected one of the stereo audio output channels to a loudspeaker, and the other stereo audio output channel to a headset [or a headphone], and a control signal, such as using a mouse to control the output balance (left or right channel) of a soundcard, would have been used to select either channel for audio output, because such a modification would have enabled the system to function as a standard telephone (headset with microphone) or a speakerphone (loudspeaker with microphone).

1.2 Regarding claim 3, the Cox reference, modified by Harmeyer and Brown, teaches routing one stereo audio channel to a loudspeaker and the other channel to a headset. Cox further teaches coupling with a telephony network and receiving telephony audio data (column 3, lines 47-55; column 7, lines 60-65; column 9, lines 22-28).

1.3 Regarding claim 4, the Cox reference, modified by Harmeyer and Brown, teaches routing either one stereo audio channel to a loudspeaker, or the other channel to a headset upon receiving a control signal after a ringing signal is detected. Cox further teaches computer telephony applications such telephone conversation and sending and receiving fax over a telephone network (column 7, lines 60-66).

1.4 Regarding claim 5, the Cox reference, modified by Harmeyer and Brown, teaches routing either one stereo audio channel to a loudspeaker, or the other channel to a headset upon receiving a control signal, but fails to teach that the control signal is generated by a manual input device coupled with said computer telephony system.

However, Brown further teaches generating switching [control] signal to select the speaker or the headphone (column 4, lines 25-31) with a manual input device such as a mouse or a keyboard (column 4, lines 6-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Cox reference, which was modified by Harmeyer and Brown, with the further teaching of Brown so that the computer telephony system would have had a manual input device to enable either the right or the left stereo output channel, such as using a mouse to control the output balance (left or right channel) of a soundcard, because such a modification would have enabled a user to select a standard telephone mode (headset with microphone) or a speakerphone mode (loudspeaker with microphone).

1.5 Regarding claim 6, Cox discloses a computer telephony system in figures 1-3. Cox's system comprises a computer 12, a microphone 14, speakers 18 and a headphone 19. The computer 12 further comprises a multi-function I/O subsystem 14 [sound system] in figures 2 and 3. Cox teaches that the multi-function I/O subsystem receives a digital signal from a ISDN connection (column 3, lines 8-12), processes the digital signal to generate a digital stereo audio signal with a left channel and a right channel, converts the right channel and the left channel audio signals into analog audio signal, and routes the stereo audio to speakers 18 and a headphone 19 (Figures 1 and 3; column 3, lines 56-67). Cox teaches connecting the speakers and the headphone to the computer 12, but fails to teach specifically routing only one stereo channel to speakers 18, or only the other stereo channel to a headset [headphone].

However, Harmeyer discloses a telephone to stereo amplifier interface in figures 1 and 2. Harmeyer teaches in figure 1 that the right channel of a stereo outputs is connected to speakers, and the left channel is connected to a handset's earphone [headphone].

In addition, Brown discloses a computer telephony system in figure 1A. Brown further discloses a switch 216 in figure 2 to select either a speaker or a headphone.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Cox reference with the teachings of Harmeyer and Brown, so that switching means, either software [output balance (left or right channel) of volume control] or hardware, would have connected one of the stereo

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audio output channels to a loudspeaker, and the other stereo audio output channel to a headset [or a headphone], and a control signal, such as using a mouse to control the output balance (left or right channel) of a soundcard, would have been used to select either channel for audio output, because such a modification would have enabled the system to function as a standard telephone (headset with microphone) or a speakerphone (loudspeaker with microphone).

1.6 Regarding claim 7, the Cox reference, modified by Harmeyer and Brown, teaches a computer telephony system over a telephone network, and routing either one stereo audio channel to a loudspeaker, or the other channel to a headset upon receiving a control signal, but fails to teach that the control signal is received after a ringing signal.

However, Brown further teaches generating switching [control] signal to select the speaker or the headphone (column 4, lines 25-31) with a manual input device such as a mouse or a keyboard (column 4, lines 6-14). Brown also teaches receiving ringing signals (column 10, lines 1-5) through the speaker (column 7, lines 46-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the Cox reference, which was modified by Harmeyer and Brown, with the further teaching of Brown so that the computer telephony system would have received the switching signal, such as using a mouse to control the output balance (left or right channel) of a soundcard, after a ringing signal is received, because such a modification would have enabled a user to select a standard telephone

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mode (headset with microphone) or a speakerphone mode (loudspeaker with microphone).

1.7 Regarding claim 8, as discussed in claim 6, both channels are switchable to their corresponding speaker and headphone, such as using a mouse to control the output balance (left or right channel) of a soundcard, so it is inherent that the modified Cox reference is able to send the ringing signal to both channels.

1.8 Regarding claim 9, as discussed in claim 6, the ringing signal is output on one audio channel connected to a speaker.

1.9 Regarding claim 12, Cox discloses a computer telephony system in figures 1-3. Cox's system comprises a computer 12, a microphone 14, speakers 18 and a headphone 19. The computer 12 further comprises a multi-function I/O subsystem 14 [sound system] in figures 2 and 3. The multi-function I/O subsystem receives a digital signal from a ISDN connection (column 3, lines 8-12), processes the digital signal to generate a digital stereo audio signal with a left channel and a right channel, converts the right channel and the left channel audio signals into analog audio signal, and routes the stereo audio to speakers 18 and a headphone 19 (Figures 1 and 3; column 3, lines 56-67). Cox teaches connecting the speakers and the headphone to the computer 12, but fails to teach specifically routing only one stereo channel to a loudspeaker or only the other channel to a headset [or a headphone]. Cox also fails to teach that a control

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signal, for selecting either the loudspeaker or the headset, is generated after a ringing signal is detected.

However, Harmeyer discloses a telephone to stereo amplifier interface in figures 1 and 2. Harmeyer teaches in figure 1 that the right channel of a stereo outputs is connected to speakers, and the left channel is connected to a handset's earphone.

In addition, Brown discloses a computer telephony system in figure 1A. Brown further discloses a switch 216 in figure 2 to select either a speaker or a headphone, and generating a switching [control] signal to select the speaker or the headphone (column 4, lines 25-31) with a manual input device such as a mouse or a keyboard (column 4, lines 6-14). Brown also teaches receiving ringing signals (column 10, lines 1-5) through the speaker (column 7, lines 46-52).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Cox reference with the teachings of Harmeyer and Brown, so that switching means, either software [output balance (left or right channel) of volume control] or hardware, would have connected one of the stereo audio output channels to a loudspeaker, and the other stereo audio output channel to a headset [or a headphone], and after a ringing signal was detected and played through a speaker for notifying a user, a control signal, such as using a mouse to control the output balance (left or right channel) of a soundcard, would have been used to select either channel for audio output, because such a modification would have been enabled the system to function as a standard telephone (headset with microphone) or a speakerphone (loudspeaker with microphone).

1.10 Regarding claim 13, it is inherent that the speaker has a volume control, either by software, such as an audio driver (Figure 7, Ref. 280) or hardware [build-in amplifier with volume control].

1.11 Regarding claims 14 and 15, as discussed in claim 12, both channels are switchable to their corresponding speaker and headphone, so it is inherent that the modified Cox reference is able to send the ringing signal to both channels, and each channel has a volume control either by software or hardware [build-in amplifier for the speaker with volume control, and in-line attenuator (volume control) for the headphone].

1.12 Regarding claims 16 and 17, the Cox reference, modified by Harmeyer and Brown, both left channel and right channel audio signals come from same telephone line input.

2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. US 5,790,781 in view of Harmeyer US Patent 4,491,694 and further in view of Brown US 5,822,406 and further in view of Bowater US Patent 6,282,269.

The Cox reference, modified by Harmeyer and Brown, teaches routing either one stereo audio channel to a loudspeaker, or the other channel to a headset upon receiving a control signal after a ringing signal is detected. Cox further teaches computer telephony applications such telephone conversation, sending and receiving fax and data

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through a modem (column 7, lines 60-67), but fails to specifically teach that the data are packetized audio data.

However, Bowater discloses an Internet telephony system in figure 3. Bowater teaches that a computer with appropriate application software is an Internet phone (column 7, lines 11-19), and allows a user to talk to another user over the Internet (column 7, lines 40-57). It is inherent that the voice data over the Internet are packetized audio data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Cox reference, which was modified by Harmeyer and Brown, with the teachings of Bowater, so that the computer telephony system would also have been an Internet phone, because such a modification would have enabled the system to utilize voice over data technology.

Response to Arguments

3. Applicant's arguments filed on 07/28/2003 have been fully considered but they are not persuasive.

The applicant argues that the Cox, Harmeyer and Brown's references are not combinable because Cox discloses a computer with a stereo output to both a headset and speakers, Harmeyer discloses a home stereo system and Brown discloses a switch between a headset and a speaker has nothing to do with a left channel and a right channel.

Examiner disagrees based on the following:

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Cox states in column 3, lines 56-58: "The stereo audio codec circuit 54 transfers audio signals (mono and stereo) to the external speakers 18 and the headphone set 19 over a set of audio signal lines 56", and for one of ordinary skill in the art, there are only certain ways to connect both the headphone 19 and the speakers 18 to the signal lines 56: A) both headphone 19 and speaker 18 are connected together to the signal lines 56 either in parallel or in series; B) connecting the speakers to one stereo output channel and the speakers to another output channel; and C) connecting only one device to the signal lines 56 at a time. Harmeyer's reference teaches that one stereo output channel may be connected to speakers and the other output channel may be connected to an earphone [headphone], and since telephone signals are mono (both left and right channels receive identical audio signals), option B will be a logical choice. Brown teaches one may select a speaker or a headphone for a speakerphone or normal telephone conversation, and for one of ordinary skill in the art, this can be easily accomplished in the modified Cox reference [Cox plus Harmeyer] by using a mouse to select the audio output balance for either left channel or right channel to use the computer as a speakerphone or a conventional telephone.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

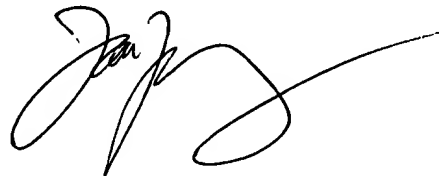
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Sing whose telephone number is (703) 305-3221. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached on (703) 305-4895. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600



S.S.

10/17/2003